Package: qsimulatR (via r-universe)

September 14, 2024

Version 1.1.1

Date 2023-10-16

Title A Quantum Computer Simulator

Description A quantum computer simulator framework with up to 24 qubits. It allows to define general single qubit gates and general controlled single qubit gates. For convenience, it currently provides the most common gates (X, Y, Z, H, Z, S, T, Rx, Ry, Rz, CNOT, SWAP, Toffoli or CCNOT, Fredkin or CSWAP). 'qsimulatR' also implements noise models. 'qsimulatR' supports plotting of circuits and is able to export circuits to 'Qiskit' <https://qiskit.org/>, a python package which can be used to run on IBM's hardware <https://quantum-computing.ibm.com/>.

Imports methods, stats

Suggests knitr, markdown, rmarkdown

License GPL-3

LazyData true

Roxygen list(markdown = TRUE, old_usage = TRUE, r6 = FALSE)

RoxygenNote 7.2.3

Encoding UTF-8

VignetteBuilder knitr

URL https://github.com/HISKP-LQCD/qsimulatR

BugReports https://github.com/HISKP-LQCD/qsimulatR/issues

Collate 'state.R' 'sqgate.R' 'ccqgate.R' 'cnotgate.R' 'cnqgate.R' 'cqgate.R' 'export2qiskit.R' 'measure.R' 'phase_estimation.R' 'plot-qstate.R' 'qft.R' 'qsimulatR-package.R' 'swapgate.R'

Repository https://hiskp-lqcd.r-universe.dev

RemoteUrl https://github.com/hiskp-lqcd/qsimulatr

RemoteRef HEAD

RemoteSha ec64c59942a7cdf0c48a207bf95112c01e603939